

### ABSTRACT

Conventional receiver architectures are based on either frequency/phase tracking or oversampling. Both receiver types typically employ sensitive analog circuits, which create noise, consume power and utilize valuable space in their implementation. The invention adopts a novel approach to phase/frequency tracking that utilizes the edges or zero crossings of the input data waveform to effectively track the remote transmitter clock phase/frequency. This methodology minimizes the use of analog circuitry, thereby reducing the noise domain and the substrate space required for implementation of a tracking device.